

Installation and Operating Instructions

JUDO PROFI 5" - 8"

Backwash Protective Filter

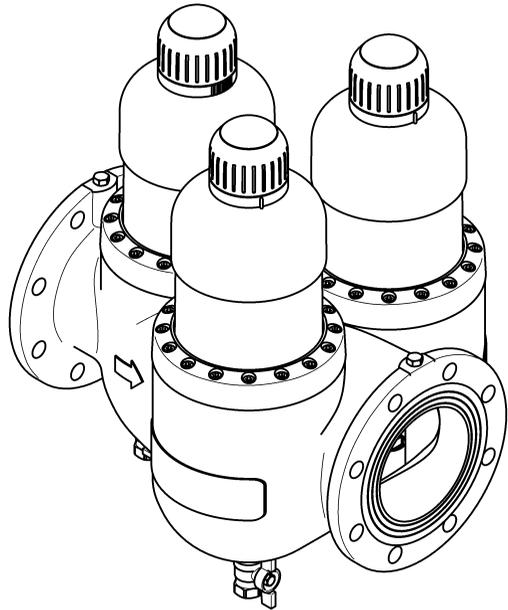
Model JPF

Valid for: Canada

Attention:

Carefully read through the installation and operating instructions and safety information before installing and putting the unit into service.

These instructions must always be issued to the owner/user.



JPF 6"



Application

The Backwash Protective Filter removes all coarse and fine grained impurities which cause pitting as aeration elements in cold and hot water supply piping, and that can lead to the malfunctioning of fittings and control- and regulation elements, as well as of sensitive devices.

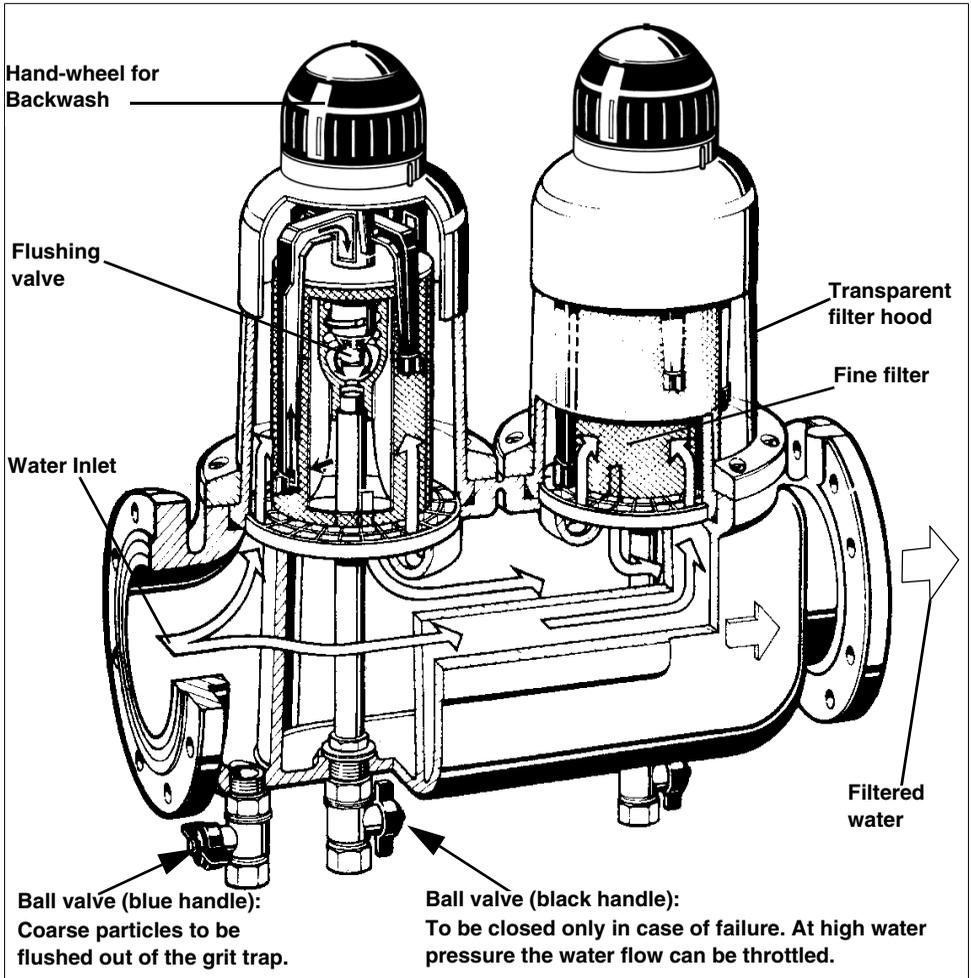


Fig. 1: Application JPF 5" - 8"

Installation

The Backwash Protective Filter should be installed in a dry and frost resistant location with a floor drain.

It can be installed into all drinking water pipes usual in the trade, in each flow direction.

To ensure easy operation and maintenance the indicated minimum distances have to be observed.

The installation into vertical lines should be effected only, if there isn't any possibility for an installation in horizontal lines.

If installing into a vertical line, the coarse particles, deposited in the grit trap can't be flushed out as optimally as when installed horizontally.

Tension-free installation has to be observed!

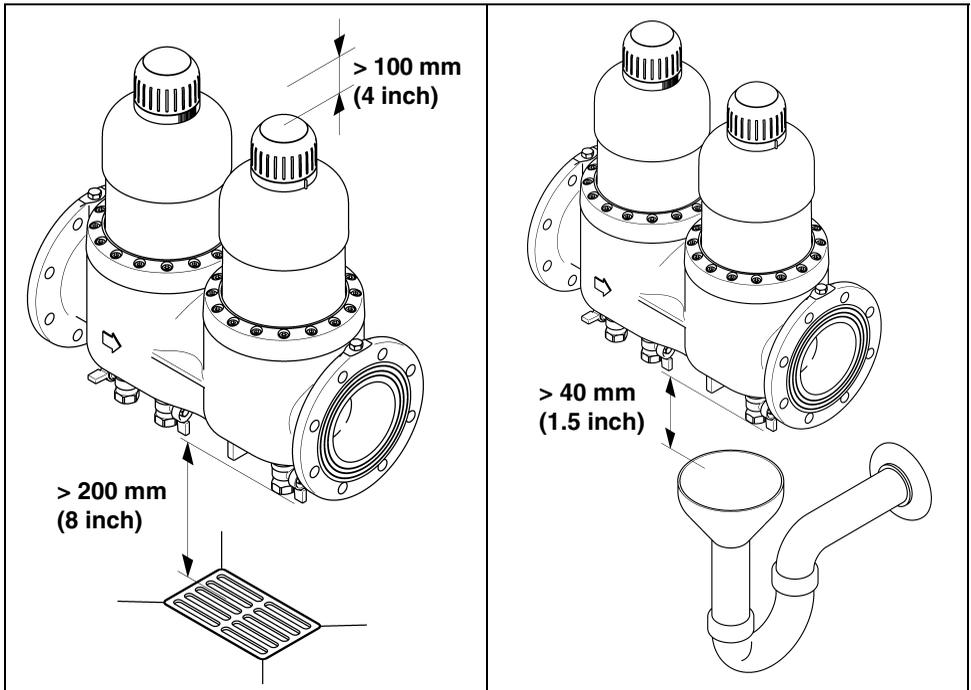


Fig. 2: Application

Example for installation

The installation of the Backwash Protective Filter is effectuated up to a water pressure of 150 psi (1000 kPa) behind the water meter, and the backflow preventer before a possibly mounted pressure reducer.

In the event of **water pressure above 150 psi (1000 kPa)**, the pressure reduction valve should be fitted **in front** of the Backwash Protective Filter (see fig. 3). If the operating pressure is above 150 psi (1000 kPa), this may result in defects during operation.

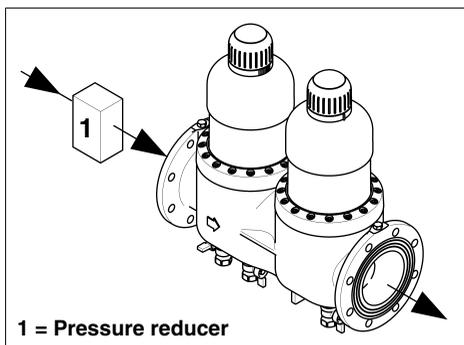


Fig. 3: Pressure reducer upstream of the unit.
Example: JPF 5"

i The installation of a pressure reduction valve is recommended for **water pressures between 73 psi (500 kPa) and 150 psi (1000 kPa)**.

For the backwashing water a wastewater connection (for example a floor drainage) in accordance with DIN 1986 must be in place. If a wastewater connection directly under the filter is not possible, the rinse water can be led by means of a line to be mounted on the rinse water valve [same dimension as the rinse water valve] a few meters away to the next wastewater connection. When pivoting a pipe for the derivation of the rinse water it has to be paid attention to the fact that the spherical faucets are not twisted, because these are pasted in by means of thread locking devices.

Design of Backwash water connection

The dimensioning of the channel cross sections for the backwash water depends on the local conditions. For example the downward gradient of the wastewater pipe, the quantity of the detours, length of the sewage pipe.

Commissioning

Before starting up (initial putting into service or startup after maintenance work), **fill** the Backwash Protective Filter with water and **vent!**

Operation

For cleaning the filter the handwheel is untwisted to the left as far as it will go and closed to the right afterwards, till no more rinse water flows out. Rough impurities can be removed by opening the sludge trap ball valve that is built in before the backwash ball valves. DIN EN 13441-1 specifies that backwashing must take place at least every six months. However, JUDO recommends to carry out backwashing every two months! Depending on the water flow as well as on the kind of coarse-grained and fine-grained impurities and the extent to which these are existing in the water, a backwashing can be necessary within shorter time intervals. The backwashing takes place at full water line pressure. At pressures higher than 2 bar, it is necessary that the backwash stream is throttled by means of the backwash ball valve. Doing this it is prevented, that the sieve cloth is damaged by a too strong pressuring of the suction tube. At the same time the rinse water consumption is reduced. With a flush valve opened to one hundred percent and a pressure between 2 bar and 3 bar the backwash volume current amounts to approx. 16 gpm (1 liter per second) concerning.

External Cleaning

Use only clear, drinking water concerning the cleaning of the housing and the transparent filter hood.

Domestic all-purpose cleaners and glass cleaners can contain up to 25 % solvents or alcohol (spirits).

These substances can chemically attack the plastic parts, which can lead to brittleness right up to [brittle] fractures.

These kinds of cleaners must therefore not be used.

Customer Service

We wish you anytime a trouble-free operation.

Should occur, however, short-comings, sometime or if there are queries, our customer service will be pleased to be at your disposal for further information.

Warranty and Services

In order to comply with the legal warranty claim, it is necessary that backwashing takes place according to the existing operating conditions (see chapter **Operation**).

DIN EN 13441-1 specifies that backwashing must take place at least every six months.

However, JUDO recommends to carry out backwashing every two months!

Further, an annual check of the set discharge pressure at the pressure gauge (visual check) when no water is flowing and at the peak flow (large amount drawn off) is necessary.

Regular servicing is indispensable in order to continue to achieve a successful process for many years after the unit is put into service. In the building services sector this is covered by DIN EN 806-5.

A servicing agreement is the best way to ensure a good operating function beyond the warranty period.

Wherever possible, the regular servicing work and supply with consumables and wearing materials, etc. should be carried out by the specialist trade or the factory's customer service department.

Type

Backwash Protective Filter

JUDO PROFI 5" - 8"

Abbreviated name:

JPF DN 5" - 8"

Models

Model	Pipe connection	Order no.
JPF 5"	5"	8290015
JPF 6"	6"	8290016
JPF 8"	8"	8290017

Technical Data

The following applies for all the models of the device:

- Pressure loss when clean (after backwashing): 3 psi (20 kPa) at the water flow rate (nominal flow rate) given in the table
- Maximum ambient temperature and water temperature: 30 °C (86 °F)
- **The water to be filtered must possess quality of drinking water!**
- Threaded connection according to ANSI B1.20.1
- Flange connection according to ANSI B16.1

Nominal Pressure: 150 psi (1000 kPa)

Operating Pressure:

22 - 150 psi (150 - 1000 kPa)

The nominal pressure denotes the pressure class, according to which the filter must fulfill the requirements to DIN EN 13443-1 and DIN 19628. The maximum operating pressure is lower, in order to ensure the optimum function of the filter.

Water flow rate

Model	Water flow rate for a pressure loss of 3 psi (20 kPa) with clean sieve insert ¹⁾
JPF 5"	100 m ³ /h (440 gpm)
JPF 6"	150 m ³ /h (660 gpm)
JPF 8"	200 m ³ /h (880 gpm)

- 1) Data concerning the water flow rate are valid for drinking water. The maximum water flow rate for more polluted water is lower, depending on the mesh size. If so, a larger dimension has to be chosen.

Installing dimensions

All dimensions in mm (inch) (see fig. 4)

Model	A	B	C	D	G
JPF 5"	560 (22.0)	250 (9.8)	446 (17.6)	197 (7.8)	¾"
JPF 6"	560 (22.0)	468 (18.4)	469 (18.5)	215 (8.5)	¾"
JPF 8"	600 (23.6)	469 (18.5)	485 (19.1)	246 (9.7)	¾"

A = Installation length

B = Unit width

C = Height above pipe centre

D = Height below pipe centre

G = Connection dimension
waste water

Weight:

JPF 5" = 90 kg

JPF 6" = 137 kg

JPF 8" = 185 kg

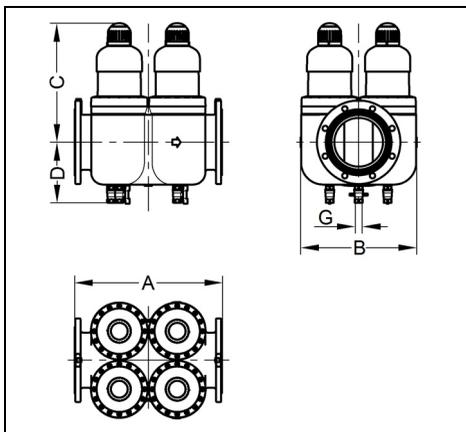
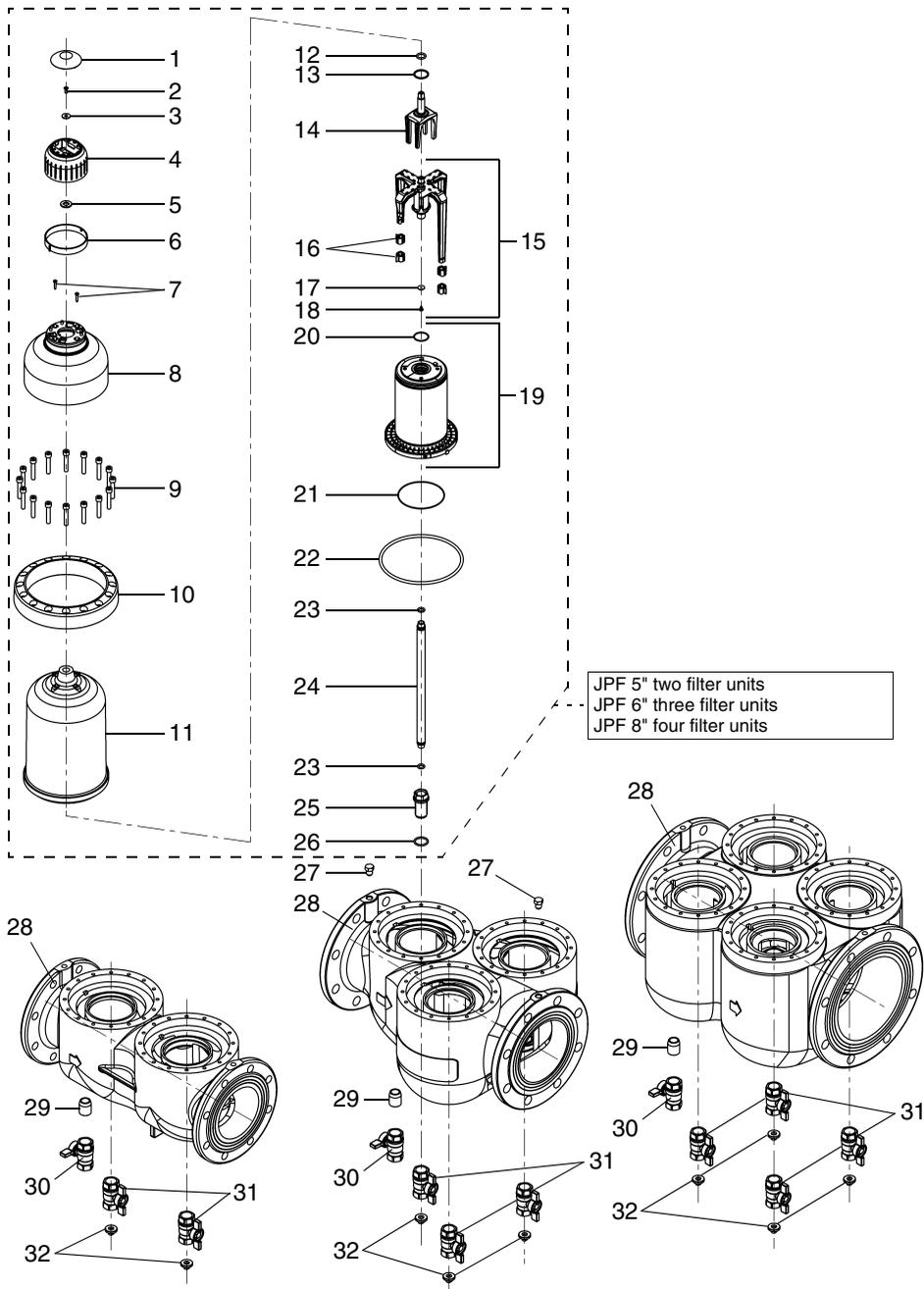


Fig. 4: Installing dimensions (example JPF 8")

Spare Parts JPF 5" - 8"



List of Spare Parts JPF 5" - 8"

Item	Designation (Recommended average replacement interval for wearing parts [*])	Piece(s)	Order no.
-	Wearing parts set "Sieve 0.1 mm and suction pipe" (consisting of pos. 12, 13, 15, 19, 21, 22, 23) ***	1	2020823
-	Wearing parts set "Gaskets 5" - 8" (consisting of pos. 12, 13, 17, 18, 20, 21, 22, 23) ****	1	2010339
1	Lid of handwheel	1	1120943
2	Countersunk screw M5x12	1	1607454
3	Disk A 6.4	1	1650142
4	Handwheel	1	1120431
5	Spacer disc	1	1120137
6	Adjusting ring	1	1120680
7	Sheet-metal screw 3.9x22	1	1650191
8	Cover filter hood	1	1120930
9	Cylinder screw M8x45	16	1650208
10	Flange ring	1	2010181
11	Filter hood	1	2021139
12	O-ring 15x3.2	1	
13	O-ring 28x2.5	1	
14	Driver	1	2020034
15	Suction pipe complete	1	
16	Mouthpiece (Nozzle)	4	
17	Suction pipe gasket	1	
18	Plate screw 4.2x9.5	1	
19	Filter screen MW 0.10 mm (0.004 inch)	1	
20	O-ring 29.87x1.78	1	
21	O-ring 100x1.5	1	
22	O-ring 178x6	2	
23	O-ring 12x3	1	
24	Flush pipe JPF 5"	1	2010060
24	Flush pipe JPF 6"	1	2010061
24	Flush pipe JPF 8"	1	2010062
25	Connection piece JPF 5"	1	2010031
25	Connection piece JPF 6" - 8"	1	2020265
26	O-ring 26x3	1	1607111
27	Plug ¼"	2	2290001
28	Filter bottom JPF 5"	1	2010053
28	Filter bottom JPF 6"	1	2010056

List of Spare Parts JPF 5" - 8"

Item	Designation (Recommended average replacement interval for wearing parts [**])	Piece(s)	Order no.
28	Filter bottom JPF 8"	1	2010059
29	Nipple	1	2010012
30	Ball valve (blue handle)	1	1610613
31	Ball valve (black handle) JPF 5"	2	1610004
31	Ball valve (black handle) JPF 6"	3	1610004
31	Ball valve (black handle) JPF 8"	4	1610004
32	Orifice disc JPF 5"	2	1440248
32	Orifice disc JPF 6"	3	1440248
32	Orifice disc JPF 8"	4	1440248

Items without order no. are only available in a set.

Replacement interval: *** = 3 years, **** = 4 years

Customer Service



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Installed by:

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